

Meeting Minutes

Date | time 4/13/2016 2:00 PM | Location The Lands Council (TLC), Saranac Building, 25 West Main Ave, Spokane 2nd Floor Large Conference Room

Project: Mycelium PCB Research	Attendees in person:
Conference Line: <div>Ex. 6 Personal Privacy (PP)</div>	Marcia Davis, City of Spokane (City) Doug Greenlund, City of Spokane Adrianne Pearson, City of Spokane Heidi Montez, The Lands Council Mike La Scuola, Spokane Health District Aimee Navickis-Brasch, NB Stormwater Engineering
	Attendees on conference line: Michelle Mullin, EPA Region 10 Philip Small, The Land Profile Maureen Johnson, Certified Safety Professional

Meeting Minutes

The meeting opened with the attendees introducing themselves.

The city discussed their goal and desired outcome for the project: develop a natural treatment system for reducing PCBs in vactor waste in response to the Spokane River TMDL which specifies zero PCB discharge to the River.

Heidi provided an overview of the experimental design and phase 1 timeline (defined on the attachments sent out with the agenda).

The following are comments discussed during the meeting:

Vactor Waste Sterilization

- ☐ Heidi indicated she intended to sterilize some of the vactor waste during phase B1 of the study. The group discussed various methods for sterilization including using UV light and pressure cooking (at 250°F and 15psi). Concerns were expressed about the potential for gases to be released as well as how the PCB equilibrium/state might be effected during the pressure cooking process. Heidi indicated she was going to research other options for sterilizing the material however pressure cooking appeared to be the best option.
 - Lisa is helping Heidi investigate options for sterilization

Vactor Waste Collection and Storage

- ☐ All the vactor waste that will be used during this study will be collected prior to the study and stored in a refrigerator or walk in cooler. During the study, samples may also be frozen and submitted for testing at a later date (if needed).

- Heidi indicated she needs approximately 10 gallons of vector waste for the entire study and that she would prefer drier samples. She also indicated that she needs a refrigerator to store the material during the study.
 - Adrienne is locating a refrigerator for the study
- Methods for collecting composite samples of vector waste were discussed specifically collecting samples for characterization (lab analysis) that are representative of what will be used during the study. Philip recommended an approach he uses called 'coning and quartering'. In addition, it was also recommended that the waste be thoroughly mixed (homogenized) before sample collection using methods that are similar to a concrete mixer.
 - Heidi will develop procedures for collecting and homogenizing the vector waste from the decant facility. Aimee will contact the lab to determine the collection procedures for the samples that will be submitted for characterization. Then Heidi and Aimee will share the procedures with the city and coordinate a day/time for collecting the vector waste.
- Lisa recommended that triplicate samples be submitted for characterization
- To reduce the likelihood of any modification to the PCB presence in the vector waste, Michelle recommended that the material be stored following the procedures and container requirements identified in EPA method 1668
 - Heidi is investigating

Testing Methods for Characterizing Vector Waste

- Michelle inquired about which testing methods were going to be used to characterize the material. For consistency, it was recommended that the same standard testing methods defined in the QAPP for the Spokane River PCB TMDL Study also be used for this study whenever possible
 - The QAPP has been uploaded to the dropbox (see pages 36-38)
- The group discussed the types of parameters that should be tested (in addition to EPA 1668) to characterize the vector waste. Suggestions included phosphorus, carbon, nutrients, and seed germination inhibition testing.
 - Heidi will develop a list of parameters and Philip agreed to review/comment on the list. Aimee will create a testing methods table that includes all the information needed for each parameter (i.e. standard methods, preservation, container, volume, etc.)
- Adrienne indicated that funding for testing is limited for this part (phase 1) of the study. She recommended that only essential parameter be tested, specifically those which will help us understand how mycelium works in a laboratory setting.
 - Adrienne will provide Heidi with a budget for testing
- Mike indicated that WSDOT has conducted a substantial amount of testing to characterize the vector waste from the Pines Decant Facility that might be useful for this study. He recommended contacting Tammie Williams or Greg Lahti from WSDOT to obtain testing information and to find out how much vector waste is disposed of each year at the facility.
 - Aimee will contact Tammie or Greg and share any information with the group

Waste Disposal

- ☐ Characterizing vector waste properties before and after the study is important to determine if the material classification changes as a result of this study (which could change disposal requirements). For example, vector waste at the WSDOT Pines decant facility is classified as solid waste. Hazardous constituents are defined on the Resource Conservation and Recovery Act (RCRA) list which is the primary environmental law governing disposal requirements.
- ☐ Need to develop a disposal protocol for research waste that contains PCBs
 - Mike La Scuola indicated he would help with the draft protocol. Heidi and Aimee will setup a meeting with him

Lab Safety

- ☐ Need to develop safety procedures for all lab work, including disposal and treatment of PCBs in the lab (Maureen Johnson indicated she would help by reviewing/commenting on the draft procedures)
 - Heidi will ask Maureen for suggestions on the procedures

Research Testing Procedures

- ☐ In support of documenting the procedures used during this study, Aimee requested that Heidi identify and outline all procedures.
 - Aimee and Heidi will meet to discuss this further.

TAG

- ☐ Since there were several members of the TAG who were not able to attend the meeting due to conflicts
 - Aimee will send out a survey monkey to determine the best time/dates for the next meeting
- ☐ Add Greg Lahti to the TAG. He is a WSDOT hydraulic engineer who could provide insight regarding the WSDOT Pines Decant Facility and WSDOT might also be interested in learning more about this study
 - Aimee will ask Greg Lahti to join the TAG.
- ☐ Need a Mycology Specialist who would be willing to become a member of the TAG
 - Aimee is investigating